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ABSTRACT

An examination of the role of the associate degree in community colleges in the United States is presented in this report, based on a review of the history of the degree; surveys of community colleges, major companies, educators, and professional associations; and the work of the National Task Force on the Redefinition of the Associate Degree. Part I outlines the evolution of the associate degree during the 20th century and identifies changes in the role of the community colleges during this period. Part II reviews the literature concerning the diversity of the associate degree, its components, ways in which it is perceived and evaluated, and recommendations for its redefinition. Part III provides an analysis of the responses of 72 of 100 community colleges, 29 of 100 high schools, and 12 of 50 Fortune 500 companies to a survey conducted to investigate the value of the associate degree and ways in which it could be improved. Part IV presents the opinions concerning the associate degree of state higher education officers, representatives of educational associations, professors of higher education, high school principals and counselors, and community college faculty and administrators. Part V presents the Task Force's conclusions and recommendations with respect to, for example, general education, degree requirements, and academic standards. Appendices include sample letters to the groups surveyed and definitions of the associate degree. (HB)

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NATIONAL TASK FORCE TO REDEFINE THE ASSOCIATE DEGREE

A PRELIMINARY PRESENTATION

Leslie Koltai, Chairman

April, 1983

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PREFACE

The American community college is becoming one of the most successful educational institutions in the world. Many developing countries have already adopted models of community technical colleges and created hundreds of institutions to usher in a new age of civilization.

In the United States, the community college is a growing educational enterprise. In the 1982-83 academic year, close to five million students chose to attend 1,219 community, junior, and technical colleges to begin, to complete, or to continue their quest for learning.

Community colleges thrive because they have a long-term commitment to open access for all citizens who can benefit from attending, coupled with dedication to sustaining and improving the quality of the educational experiences they provide.

Community colleges are eager to respond to the needs of a growing student population, and, as one of their missions, they award associate degrees at the completion of the designated two-year curricula.

During the last decade, the numbers of associate degrees awarded increased by approximately 60 percent compared with an increase of 11 percent for the baccalaureate degree. In fact, associate degrees, which accounted for more than 18 percent of all degrees in 1970, grew to 23 percent at the end of the decade.

The community colleges are proud of this achievement. However, there is a growing desire to initiate a national dialogue on the goals, definitions, and quality of this degree.

The president of the American Association of Community and Junior Colleges appropriately recognized the need for determining the present status of the associate degree, and the National Endowment for the Humanities made it possible to plan for such discussion.

In these days of austere budgets, collective bargaining, and retrenchment, a review of the associate degree

requires exceptional perception, a deep commitment to quality, as well as an understanding of society's needs.

This presentation is the result of a fundamental process of inquiry which began with the review of literature pertaining to the history, trends, and meaning of the associate degree.

As a second step, a survey instrument was sent to a hundred community, junior, and technical college districts with a total enrollment of approximately two million students. A different questionnaire was sent to a hundred high schools and fifty Fortune 500 companies. In addition to these surveys, twenty academic and professional associations and ten university professors in the field of community college education were invited to comment on the subject. Also, a special effort was made to contact the state higher education officers across the country.

The responses were compiled and analyzed, opinions and essays were placed into appropriate categories, and, after further review, recommendations are presented for further discussion.

The most valuable aspect of this initial presentation is the formation of a national Task Force on the Redefinition of the Associate Degree. The Task Force is composed of some of the foremost educational leaders and experts in the country, including a high ranking official of the present administration; public and private university presidents; leaders of national accrediting and testing agencies; chief executive officers of community and technical colleges; a superintendent of a large, urban public school system; and professors of higher education.

I

UP TO NOW:
An Historical Perspective

Any understanding of the associate degree as it now exists must be grounded in an awareness of its evolution throughout this century.

The birth of the associate degree and, indirectly, the two-year college can be traced to the University of Chicago which, in 1900, began awarding associate degrees in arts, literature, and science at the end of the sophomore year. It was the University's president, William Harper, who is credited with fostering the foundation of Joliet Junior College in the State of Illinois in order to serve as a feeder institution to the University of Chicago. It is interesting to note that Joliet Junior College was characterized as an institution ideal for technical and paraprofessional training and a "junior college" with the added advantage of easy proximity and lower cost to the student.[1]

By 1918, there were seventeen junior colleges in the country granting the associate degree. "The junior colleges is an institution offering two years of strictly collegiate grade," declared the newly-founded American Association of Junior Colleges.[2]

By 1928, seventy-two of the junior colleges throughout the country awarded the associate degree. Many believed that the main advantage of the early two-year college programs was that they provided an "honorable end" to postsecondary work for those "not fit" to complete a four-year program.

In the '30s and '40s, growth and experimentation continued with a new emphasis on defining the role as to whether to stress lower division collegiate work or vocationally-oriented skill training.

A review of literature suggests that "at nearly every organizational meeting held by the American Association of Junior Colleges, the subject of occupational education was on the agenda," with the Association "aware that it had to take a leadership role in directing the movement for terminal education," as it was then called.

In 1939, the Association created a commission on junior college terminal education to study the role of non-academic or vocational programs which, at that time, accounted for about one-third of the courses offered at the approximately two hundred junior colleges then in existence.

In 1944, the National Education Association's Commission on Educational Policies pointed out that a one- or two-year program of occupational education was not only beneficial to the individual--it was worthwhile for the country.

The end of World War II brought a shift in focus as young men rushed back to the campuses eager to prepare for participation in the good life. The GI Bill was instrumental in opening a new era of two-year college education.

And, in 1947, the President's Commission on Higher Education "recommended an increase in the number of community colleges so that students who might not benefit from a full four-year course of studies could attain an education enabling them to take their place in the American workforce." The Commission spoke specifically of programs enabling graduates to enter skilled, semi-professional and technical jobs.[3]

As John Lombardi pointed out, it all began with the post-World War II era, which "marked the beginning of the second major growth period for the junior colleges and, along with other aspects, the associate degree became one of its more important characteristics." By the late '50s, the degree was accepted and authorized as verification of genuine academic achievement in nearly every state. Proliferation of various types of degrees followed, with associate in arts, associate in science, and associate in applied science tallying the largest total of awardees.[4]

Since the 1950s, each decade has found two-year colleges responding to different societal needs. First, there was the call to help this country respond to the Sputnik challenge, with math and science being stressed in the curriculum. The 1960s saw emphasis on expanded educational opportunities to serve those who had previously been neglected by higher education, while the '70s brought compensatory and vocational education into the forefront, as the colleges responded to greater disparity in students' ability and their increased preoccupation with preparing for a career.

During those years, the colleges underwent rapid expansion, with increases of up to 15 percent a year.

There were 566,224 students in American community colleges in 1960, 2,366,028 in 1970, and 4,366,028 in 1980. That figure changed to 4,823,003 in 1982.

This phenomenal growth was largely due to the fact that "of all higher education institutions, the community colleges contributed most to opening the system" and "were available to all comers, attracting the 'new students,' the minorities, the women, the people who had done poorly in high school, those who would otherwise never have considered further education."[5]

And the influx of these "new students" affected the colleges in terms of curriculum and delivery systems. Since many were academically underprepared, compensatory education came into the spotlight, with nearly 60 percent of all public two-year colleges found to have compensatory programs in a 1973 study and one-third of the community mathematics courses taught at a level lower than beginning algebra by the mid-1970s.

There was also an impact on how, when, and where education was offered, with courses available in the evening, at outreach centers, and even on television.

For example, part-time students went from 53 percent of total enrollment in 1963 to 62 percent in 1980. By 1979, Alabama had a nationwide high of 80 percent of its enrollment as part-timers, and 74 percent of Arizona's community college students were attending part-time.

Another dramatic shift was found in the ratio of freshmen to sophomore enrollment. While a fairly consistent ratio of 2.4 freshmen to one sophomore was evident from the early '50s to the mid-'70s, the proportion of students completing two years was less than one in five by the end of the 1970s.

Financial aid programs expanded rapidly, as well, with student assistance programs found in 12 states in 1964, 22 in 1970, and in all but a few states by the beginning of this decade.

Focusing in on trends in associate degree awards during the 1970s, data from the National Center for Educational Statistics indicate reflection of a changing society--and a changing community college.

Numbers of degrees awarded in vocational areas showed substantial increases, with a nearly 78 percent

increase among mechanical/engineering technologies--and an 184 percent jump for health services and paramedical technologies. Degrees in science and engineering-related programs increased 23 to 32 percent.

Arts, sciences, and general education programs did not fare as well, however. While these categories accounted for about 57 percent of the total number of associate degrees awarded in 1970-71, they had dropped to just 37.5 percent by 1979-80.

Demographic changes were evident, as well. Since 1976-77, women have been receiving more associate degrees than have men, even though men still outnumber women in every other degree category. Women scored an increase of 102 percent during the '70s in the number of associate degrees earned, according to the National Center for Education Statistics.

Reflecting the increased interest among all segments for vocational training, the percentage of associate degrees awarded to women in career areas went from about 43 percent to 55 percent. For example, women earned about 40 percent of science and engineering-related associate degrees in 1970-71, and 52.4 percent by 1979-80.

The '70s also saw as many as 16 percent of associate degrees being awarded to members of minorities, compared with about 12 percent of baccalaureate degrees earned by racial minorities. Associate degrees in business and commerce technologies were the most common. In 1979-80, non-whites accounted for 18.5 percent of degrees in business and commerce technologies, and 20 percent of those received in data processing and public service-related technologies.

And now, in the 1980s, enrollment in career education continues to increase among all categories of students. In fact, for many community colleges, vocational curriculum has become their major focus, reflecting society's increased demand for job preparation.

The 97th Congress in 1982 approved Public Law 97-300, the Job Training Partnership Act, which again puts the emphasis on community colleges in joint federal-business-education programs. This legislation "signals a new era for vocational education and the private sector to collaborate in providing job training and related services. Its focus is on enabling economically disadvantaged individuals and others in special need of training to begin employment," according to VocEd magazine.

And among pending pieces of legislation is SB 631, "The High Technology Morrill Act," which has been referred to committee. It is aimed at underwriting science and technology training.

Other pending legislation may incorporate such issues as high technology programs and possible associate degree designations.

These pieces of legislation reflect a new federal policy and, to community and technical colleges, is reminiscent of the era of the 1958 National Defense Education Act and its impact on strengthening humanities and sciences in higher education.

At that time, it was a reaction to the potential of Russian advancement in science. This time, it is a reaction to, among other things, the Japanese factor in the traditional American market place, suggesting that this country cannot survive without a cohesive national plan including new emphasis on teaching of high technology in colleges.

In this light, the associate degree continues to be a significant contribution to the nation's economy and security.

II

STRENGTH THROUGH DIVERSITY:
A Review of Literature

Community colleges, as local institutions, have always highlighted diversity in programs, facilities, students, and objectives.

An examination of the literature concerning the diversity of the associate degree, its components, and the ways in which it is perceived and evaluated is essential to an understanding of the degree as it now exists, as well as to the formulation of recommendations for its redefinition.

Stephen H. Spurr, in his book, Academic Degree Structures, noted that, in addition to providing an education for its students, an institution of higher learning has another important function: the certification of the education they have attained. And it was to fulfill this certification function, he wrote, that degrees, certificates, and diplomas were developed.[6]

According to a report on the study of credentialing educational accomplishment conducted by the American Council on Education, never has this certification function been more important than it is today.

That report concluded that, "A mobile, complex society supported by a technological economy is, by its nature, dependent on formal certification to identify the qualified, to protect against the incompetent and the fraudulent, and to encourage learning and competence."[7]

The report pointed out that, in an increasing number of career specialties, it is difficult to quickly and confidently measure the difference between the competent and incompetent when evaluating job applicants. Degrees, in this situation, serve as proxies for merit, or as pre-sorters of attainment.[8]

Keeping this in mind, the report continued, "Tomorrow's students will be more concerned with how the institution's credentials will help them get a job or pursue advanced study, and employers will be more concerned with the validity of credentials for the work place."[9]

In this light, there exists a "need for educational credit and credentials to represent more precise measures of educational accomplishment."[10]

At the heart of discussion of any degree is an analysis of the curricula upon which attainment of that degree is based.

Critics of the associate degree note the diversity of curricula, while supporters of the degree and the community colleges suggest that much of their strength and vitality comes from the diversity of the curriculum upon which they are actually and philosophically based.

James W. Thornton, Jr., in The Community Junior College, wrote, "The community junior colleges especially must provide a wide variety of curriculums, but each must combine demanding standards of student achievement with responsible and effective guidance...."[11]

At the heart of the debate about redefinition of the associate degree is the issue of general and liberal education, especially in terms of its role in the instruction of career-minded students.

Donald Schmeltekopf of Union College and president of the Community College Humanities Association wrote, "Most educators would probably agree that the humanities constitute a fundamental component of the intellectual development of students. Yet no other area in higher education, especially in the community college, has a more doubtful position.

"Compared to the sciences, social sciences, mathematics, various technologies and career programs, the humanities are typically something of an afterthought... whether in the minds of students, professional colleagues, or the public.

"It is not news that the humanities have been, and are, in a protracted retreat."[12]

And Joseph Duffey, former chairman of the National Endowment for the Humanities, also addressed the issue, particularly in terms of two-year college programs, saying, "The humanities are not the sacred province of a select few. They are, instead, the intellectual and spiritual resources by which a society as a whole perceives and gives shape to its cultural life and legacy.

"No set of institutions is better placed, literally, than our community colleges, to insure public access to these resources--resources that are the rightful heritage of all our citizens."[13]

It was his successor--and one of the panel of respondents today--William J. Bennett, chairman of the National Endowment for the Humanities, who last November sounded a warning when he told the National Council of Teachers of English, "Humanities courses in colleges and schools have degenerated into a 'jumble of indiscriminate offerings' with 'no rationale and no guidance or coherence for the mind or imagination.'"

At that meeting, he criticized contemporary educators for replacing the traditional goals of intellectual refinement and spiritual elevation with curricula that were shallow and fragmented.

He said that, as they now stand, "The activities undertaken in the name of the humanities don't seem to add up to anything; they don't define anything. The studies we associate with the humanities today no longer stand for a unified set of principles or a coherent body of knowledge."

Instead, they have become "frighteningly fragmented, even shattered."[14]

Also addressing the issue has been the American Association of Community and Junior Colleges, which in a 1979 Assembly Report noted that "the diverse needs, abilities, and objectives of community college students post special problems for education in the humanities. So, too, do reduced institutional support for the humanities, public expectations that colleges should concentrate on providing immediately applicable job skills, and the mistaken notion that the humanities have little to do with career needs, declining enrollments and offerings in the humanities, reductions in humanities faculties, and a sense of dispiritedness among some of those who remain."

Also speaking to the issue of the humanities in occupational curricula was Arthur Cohen, professor of education at the University of California, Los Angeles, and director of the Center for the Study of the Community College, who wrote, "The humanities should be available to students in occupational programs through other than traditional course formats.

"It is not productive for humanities instructors to attempt to make their courses required for students in occupational programs," he wrote, adding, "There is too much resistance on the part of the faculty, their students, and community advisory boards. The humanities faculty must create modules, short segments that can be inserted into the occupational programs themselves.

"These segments can deal with aspects of the humanities that have meaning for students in those programs.... More needs to be done with literature, history, and other disciplines in developing short segments of interest to students in automotive, electronic, and engineering technology programs."[15]

This issue of humanities and their relevance to career-oriented programs was also discussed at a 1979 conference sponsored by the American Association of Community and Junior Colleges and the National Endowment for the Humanities. According to reports of the conference appearing in the Chronicle for Higher Education, it was observed that "a major factor in the declining interest in the humanities at some community colleges is the fact that traditional humanities professors find it hard to make their

courses attractive to students, who are not well-prepared or enthusiastic about the humanities, without 'watering down' their courses.

"It is a problem of how do you give 'Plato for Plumbers' without offering pabulum for Plato."[16]

As Norman Harris and John Grede, in their book, Career Education in Colleges, observed, "Dualism in education remains very much with us. The dichotomy between liberal learning and occupational training is alive and well."[17]

And yet, they noted, "As technological development proceeds, work becomes more and more like education. The cognitive content of work at all levels and in all spheres of economic activity increases.

"Whereas at one time, disciplines such as English, mathematics, economics, psychology, and the sciences would most certainly not have been regarded as vocational subjects, today selected content from these disciplines is essential to the occupational competence of the majority of the work force."[18]

A call for closer connections between career education and liberal learning comes from Lewis Solmon, who studied the relationship between college courses and students' satisfaction with education after they join the workforce. He surveyed graduates of all types of programs, several years out of college, and found that they wished they had more background in English, psychology and interpersonal relations.[19]

On the same subject in the Carnegie Foundation's book, Missions of the College Curriculum, the following attributes were described as worthy goals of effective general education programs. The report states that occupational graduates should have a solid foundation in practical skills and technical knowledge pertinent to the specific job they are about to enter. But, among other things, they should also be:

* appreciative of the local, national, and international context of their occupational endeavors;
* aware of fields of knowledge that offer data and insights relevant to the selected occupation;
* capable of communicating effectively with coworkers, superiors, customers, and the general public;

* able to recognize excellence in products, performance of associates and competitors, and plans for future developments; and
* able to set and meet standards of ethical behavior and morality.[20]

These findings would come as no surprise to James O'Toole, who, in his book, Work, Learning, and the American Future, wrote, "A broad, liberal training rooted in practical real-world problems may be a requisite for survival and satisfaction in the future."[21]

There are social implications, as well, in a well-balanced curriculum. As Arthur Cohen and Florence Brawer point out, liberal learning and general education "must not be optional, lest the gulf between social classes in America be accentuated as members of the elite classes learn to control their environment, while the lower classes are given career education and training in basic skills."[22]

Harris and Grede also warn of the dangers of curriculum-based class distinctions and limitations.

There are many, however, who are not optimistic about reform and change in this area, including James O. Hammons

of the University of Arkansas, who noted, "General education, like progress, is generally viewed with favor, but its predecessor--change--is viewed with fear and suspicion.

"In order for change to occur, the dead weight of inertia must be overcome," he wrote. "General education will need to be defined and sold, its content and goals determined.

"In addition, faculty will have to be trained; student support enlisted; curriculum changes approved; materials of instruction developed or purchased; organizational structures reexamined; compromises worked out on numbers of hours to be devoted; articulation agreements with four-year colleges developed; and so forth."

While the task is not easy, he said, "it must be undertaken if the community college is to prepare its students with the education they need for survival today.

"Earlier in its history, the community college had a opportunity and missed it. . . . For the community college, 'next time' has arrived."[23]

Even though employees are dealing with more and more sophisticated technology in the work place, the literature

suggests that the generic vocational abilities of reading, writing, computing, and communicating are prized by business and industry above the more specific job-related skills.

Charles Bowen, IBM's program director for educational development, was clear about what his company is looking for in prospective employees.

"'The main thing we want is the ability to understand and solve problems,' he said. 'I suspect that involves a broader interdisciplinary education of the people we hire.'"[24]

This response is by no means unique. In a study quoted in VocEd magazine, it was emphasized that the business community needs, "above all, workers who can read, write, compute and think...that it can get the job done only with employees who get to work on time, cooperate with each other, take responsibility and can adapt to change."[25]

And Lusterman's 1977 study of large firms indicated that employers want entry-level workers who are trainable and literate.[26]

As the American Council on Education study on credentialing educational accomplishment points out,

"The closer the relationship between the specialized learning represented by a certificate or degree and the right to practice an occupational specialty, the greater the utility of an institutional diploma as a credential qualifying the holder for employment."[27]

In light of business and industry's preference for reading, writing and communication skills, coupled with educators' belief in liberal learning, a number of questions are posed concerning the balance implied in the traditional view of associate degree career preparation, particularly in terms of which aspects should be enhanced and which should be minimized. And this issue has not been ignored by the literature.

O'Toole is adamant in warning against "specializing vocational training in the mistaken belief that it will make a young person more employable." Too often, he said, the result is individuals who not only cannot claim to be broadly or liberally educated--they can barely read, write or compute.[28]

In his book, Work, Learning, and the American Future, he observed: "The new vocationalism simply narrows the

focus of education and, in doing so, eliminates too many options for our students." He calls this preoccupation with vocationalism "inappropriate to the task of preparing young people for a changing and uncertain future."[29]

Harris and Grede also called for "well-planned, competency-based educational programs for paraprofessionals, semi-professionals, and technicians."[30]

Echoing the need for well-rounded programs was Frederick Rudolph, who warned of "something called 'career education'--a movement that promises its victims technical skills and 'positive' attitudes toward work, but neglects those educational experiences that might help to make them good, interesting, and wise men and women."[31]

Also calling for a broader view of career education, M.J. Feldman said that the community colleges can best serve their students by supplying them with skills leading to jobs that provide decent salaries and the opportunity advance. "Merely to offer blind-alley employment and obsolescing trades to youngsters in a dynamic technological society is to exchange one kind of subservience and dependence for another."[32]

Speaking to the issue of providing more choices for students, Cohen and Brawer make the point that, of itself, "occupational training involves a higher risk for the student than does liberal arts education. Occupational training is almost entirely wasted if there is no job at the end," while broader liberal education at least holds certain options open for the student. They suggest that initial training be made "sufficiently broad so that the skills learned are applicable to a variety of occupations," by such methods as integrating the humanities into career preparation programs.[33]

The opinions expressed in this chapter stress the need for general education as an important part of the associate degree requirement. In that context, humanities require more attention and structure. Just what direction American community colleges should take is still subject to debate.

The very existence of the degree is a result of the early twentieth century educational reform which allowed students to move at the end of a two-year curriculum in a variety of directions.

III

A DEGREE OF SUCCESS:
A Survey of the Associate Degree

Presently, there is a growing public interest in the quality and the variety of academic and professional degrees awarded in higher education.

Individuals, associations, governmental agencies, foundations, as well as business and labor groups are studying the substance and relevance of "higher learning in the nation's service." Ernest Boyer and Fred Hechinger point out that, "America's colleges and universities seem today to be waiting for new cues from offstage prompters rather than setting their own objectives." [34]

The American people's trust in education was strongly confirmed by the 1982 Gallup Polls, which revealed that eight Americans in ten regard schools "as extremely important to one's future success."

The community colleges continue to be the best hope for millions of Americans, and, therefore, are entrusted to fulfill a broader social mission. In that context, this study is an effort to enlarge the vision and confidence of the people who are associated with the colleges as students, faculty, support staff, and administration.

A casual review of national and local newspapers suggests that community colleges are about to enter or be affected by a significant period of educational reform. In this environment of change, the community college movement must clarify its own role and study its own mission.

The responses in this study are helpful as a self analysis regarding the status of the associate degree as visualized by community colleges, high schools, universities, professional associations, and by the business community.

Out of one hundred college districts, 72, located in 26 states, responded to the inquiry form. These districts represent a student population of 1,561,497 and a mean enrollment of 7,769 in 201 colleges.

Twenty-nine high schools in 26 states with a total enrollment of 38,557 and a mean enrollment of 1,430 participated in this sample survey.

A relatively small percentage of polled companies responded to the inquiry -- 12 large corporations with a total number of 670,175 employees and a mean employment figure of 55,847.

In the analysis of the responses, three statistical measures were used -- frequency distribution, percentage, and mean.

In the application of frequency distribution, the number of responses under each single category is represented in a variety of tables.

Percentage was utilized for the interpretation of different statistical computations and for the analysis of various tables.

Mean, the most widely used measure of control tendency, was computed by adding up the total number of responses and dividing it by the number of respondents.

Of the sampled community colleges, 74 percent operate in the traditional semester mode; 23 percent use the quarter system; 2 percent use a modified semester; and 1 percent is on a trimester calendar.

In the first response, college districts reported they offer the following list of associate degrees:

TABLE 1

PERCENTAGE OF RESPONDING
COMMUNITY COLLEGES OFFERING DEGREES

ASSOCIATE DEGREE	PERCENTAGE OF COLLEGES
Associate in Arts	97
Associate in Science	74
Associate in Applied Science	45
Associate in General Studies	17
Associate in Liberal Arts	4
Associate of Occupational Studies	2
Associate in Engineering	2
Associate in Computer Science	2
Associate in Secretarial Administration	2
Associate in Engineering Technology	2
Associate in Business Administration	2
Associate in Arts and Science	4
Associate in Applied Arts and Science	4
Associate in Applied Arts	2
Associate in Fine Arts	2
Associate of Applied Business	2

The most traditional associate in arts degree is offered by 97 percent of the colleges. However, Table 2 shows a 7 percent drop in the number of associate in arts degrees awarded by responding colleges between 1978 and 1980, and it is suspected that the progressive decline will continue. All other degrees show an increase in student demand.

Table 2 reports a significant change in students' demand for the various associate degrees.

TABLE 2

NUMBER OF DEGREES GRANTED FROM 1978-79 TO 1980-81

ACADEMIC YEAR	ASSOCIATE IN ARTS	ASSOCIATE IN SCIENCE	ASSOCIATE IN APPLD SCIENCE	ASSOCIATE IN GENL STUDIES	ASSOCIATE IN LIBERAL ARTS	OTHER*
1978-79	38,822	16,448	34,540	1,213	482	2,982
1980-81	35,891	17,556	37,557	1,590	530	3,052
Variance	-7.5	+7	+8	+24	+9	+2

*OTHER: Includes Associate in Business Administration, Associate in Applied Science, Associate in Applied Business, and Associate of Occupational Studies

Some of the reasons for the change in students' demand for the various associate degrees in Table 2 are found in responses received from Fortune 500 corporations. They report that the associate degree holders they hire are in technical fields.

Commenting on the relatively small number of community and technical college graduates in large corporations, Darlene J. Aiken, from Eastman Kodak Company, says, "We hire associate degree people only in the areas of electrical, mechanical, and chemical technology. They are hired to function as technicians in positions relating to engineering/scientists on one hand and craftsmen/production workers on the other."

There is a substantially higher percentage of four-year college and university graduates as opposed to community college graduates employed by these companies: Seventeen percent of the employers indicated they hire between 10 and 30 percent of the graduates; 25 percent hire between 20 and 30 percent; 8 percent hire between 40 and 50 percent; and 8 percent hire between 90 and 100 percent.

The supervisor of college recruitment of an automotive manufacturing company indicates that a bachelor's or master's degree is preferred for the professional positions in his company.

Charles Adair, Managing Director of American Can Company, relates the firm's promotion percentage among employees without a degree, with an associate degree, and with a bachelor's degree. The promotion rate is 8.7 percent for those without degrees; 8 percent for those with associate degrees; and 14 percent for employees with bachelor's degrees.

Promotion rates are highest for those with a bachelor's degree and the lowest rate belongs to those with an associate degree.

The Manager of Employee Relations of an oil field products and services company indicates that employees with an associate degree in a technical-related field have an excellent advancement potential compared to those without an associate degree. This opinion is shared by a manager of a large manufacturing company.

The Manager of College Relations from a chemical and allied products company indicates that promotion potential is "better for whose with an associate degree. It shows a desire to learn."

The change in student demand requires a careful review of the various unit components of the associate degree. Of the total number of districts surveyed, 77 percent were in agreement with the present requirements, and 23 percent were not in agreement with the distribution of units, and they proposed changes that will be discussed under the pertinent section.

Table 3 represents the mean unit requirement in each area of seven different associate degrees among the respondent colleges.

TABLE 3

MEAN UNITS REQUIRED FOR A
COMPARISON OF THE ASSOCIATE DEGREE

Area	Mean Units Required For						
	Assoc in Arts	Assoc in Sci	Assoc in Applied Science	Assoc in Arts/Assoc in Science	Assoc in General Studies	Assoc in Bus Admin	Assoc in Fine Arts
Major	21	24	32	27	33	18	24
Electives	19	18	10	6	13	9	2-14
Behavioral Science	4	4	4	3	6		
Communication	5	5	6	8	5	6	6
Humanities	7	3	5	6	5	8	8
Natural Science	8	3	5	5	3	4	3
Physical Science	5	8	6	11	5	3	
Social Science	7	5	6	5	6	15	6
P.E./Health	3	2	2	3	2		
Total	79	72	76	74	78	63	61

The associate in arts degree requires more units in the areas of humanities, natural science, social science, and physical education/health; an equal number of units under behavioral science and communication, and less units in the major, electives, and physical science.

Responding colleges reported that the overall mean units required from all associate degrees are: 24 units for the major; 11 units for electives; 4 units

for behavioral science; 6 units for humanities; 4.5 units in natural science; 6 units in physical science; 7.5 units in social science; and 2.5 units in physical education and/or health.

Table 3 also indicates that more than two years of college work are required for most of the listed degrees. The mean total number of units required for an associate in arts degree is 79; associate in science degree is 72; associate in applied science degree is 76; associate in arts/associate in science degree is 74; associate in general studies is 78; associate in business administration is 63; and associate in fine arts is 61.

Many opinion surveys raise the question of entry and academic standards in higher education. It was one of the objectives of this study to look at the role of assessment in the associate degree program.

Seventy-two percent of the responding districts have stipulated that their colleges provide entry-level assessment for the associate degree candidates, and 28 responses reported no entry assessment.

A majority (60 percent) of the districts which provide student assessment indicate that the purpose of testing is to measure the need for remedial courses before the student begins the actual degree preparation.

Seventy-one percent use the results to determine course eligibility and 7 percent to determine personal and career counseling, advisement, and student placement purposes.

Thirty-nine percent of the respondents indicated that they provide testing in basic skills and in the major study areas, and 61 percent offer no testing at all.

Table 4 indicates the frequency of responses relating to the point at which testing takes place.

TABLE 4

NUMBER OF RESPONDENTS INDICATING
WHEN TESTING IS PROVIDED

	0 1 2 3 4 5 6 7 8 9 10
Prior to basic skills courses	
Entry/Orientation	
End of Program	0 1 2 3 4 5 6 7 8 9 10

In summary, Table 4 indicates that 13 percent of the respondents provide testing prior to basic skills courses; 14 percent during entry/orientation; and 8 percent at the end of the program.

The question, "What type of special assistance does your institution provide for those seeking an associate degree?" resulted in the following responses: Ninety-one percent of the respondents said they offer counseling to prospective associate degree candidates; 74 percent, orientation; 36 percent offer academic advisement, developmental education, learning centers, special education, EOP&S, upward bound, tutoring, pregraduation check, transcript evaluation, faculty advisement, remediation; 23 percent offer individual tracking; and 6 percent do not offer special assistance to those seeking an associate degree.

From the high schools, responses indicate that the schools offer the following type of guidance concerning two-year colleges and associate degrees: Ninety-three percent offer information regarding location of community or junior colleges; 79 percent furnish information regarding different programs; 76 percent offer information on the size of community or junior colleges; 66 percent provide information regarding type of instruction; 66 percent

advise on degrees offered; 62 percent offer information regarding transfer of units; 62 percent communicate advantages over other institutions; and 21 percent provide information regarding cost and other general aspects of two-year colleges.

Another measure of quality in the associate degree program is the availability of honors courses in community colleges. Twenty-eight percent of the sampled college districts report offering honors courses but the vast majority (72 percent) do not.

An additional survey question sought to determine the difference between specifically designed honors courses and the standard program. Table 5 is a comparison of the two.

TABLE 5

BASIC DIFFERENCES BETWEEN HONORS COURSES
AND STANDARD COURSES - NUMBER OF RESPONSES

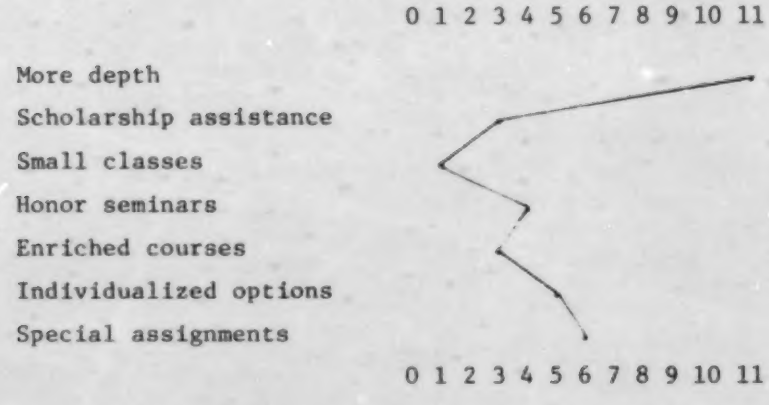

0 1 2 3 4 5 6 7 8 9 10 11
More depth
Scholarship assistance
Small classes
Honor seminars
Enriched courses
Individualized options
Special assignments
0 1 2 3 4 5 6 7 8 9 10 11

Table 5 indicates that 15 percent of the respondents consider that the basic difference between honors courses and standard courses is the degree of depth; 4 percent offer scholarship assistance; 1 percent, small classes; 6 percent, honors seminars; 4 percent, enriched courses; 7 percent, individualized options; and 9 percent, special assignments. More depth and special assignments are the most significant differences between honors courses and standard courses.

There are two questions related to high technology in the survey and both require special attention. One relates to the possible impact of high technology development on student demand for more programs, and the other is an attempt to find out what curriculum changes would satisfy this new demand.

To begin with, 71 percent of the respondent institutions indicated that high technology has influenced their programs; 29 percent suggested no impact.

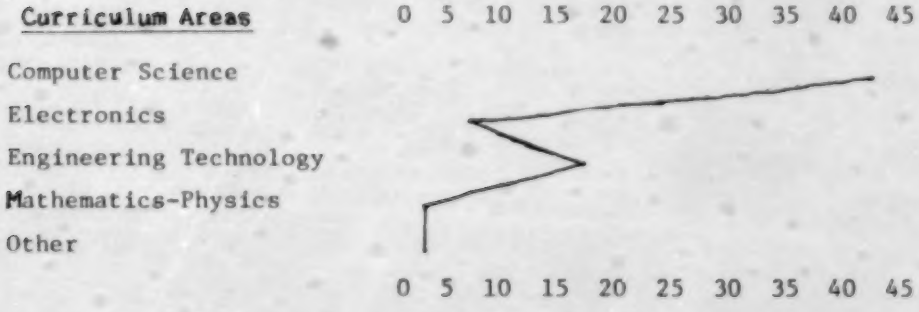
In a growing number of four-year colleges and universities, there is a requirement for degree candidates to interpret computer data and have experience in data

processing. Yet, only 6 percent of the community college respondents indicated a course in data processing as a requirement of the associate degree.

Table 6 clearly demonstrates that computer science is the area of the college curriculum most heavily impacted by high technology, followed by engineering technology, electronics, mathematics and physics, and, finally, communications, word processing, and drafting.

TABLE 6

INCREASES IN NEW COURSES DUE TO
HIGH TECHNOLOGY BY NUMBER OF RESPONDENTS



The above curriculum areas include the following courses as indicated by the respondents:

Computer Science - Courses in microprocessors, computer science, computer repair, data processing, computer literacy, computer numerical control, computer language, computer graphics, automative office management, computer aided design/computer aided manufacturing (CAD/CAM), and quality control.

Electronics - Courses in electronics, micro-electronics, electronics test technician, and laser optics.

Engineering Technology - Courses in robotics, engineering, avionics, engineering technology, and energy science.

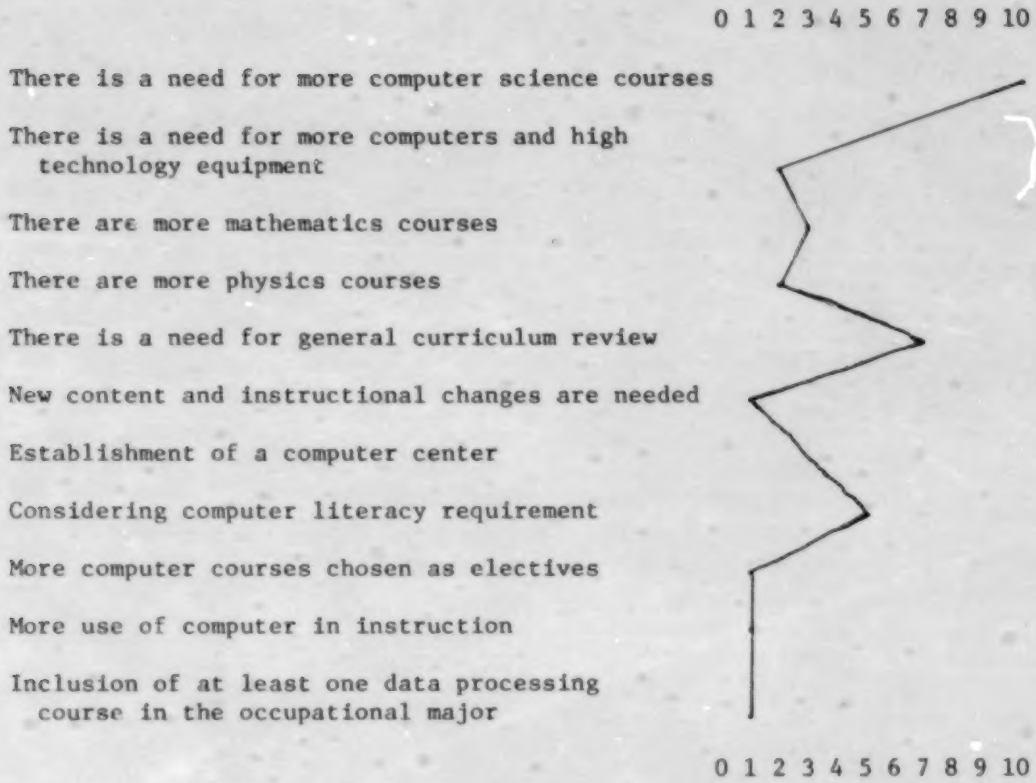
Mathematics-Physics - Courses in mathematics, physics, and physical science technology.

Other - Courses in communications, information word processing, and drafting.

A further indication of the influence of high technology on colleges is designated in Table 7.

TABLE 7

IMPACT OF HIGH TECHNOLOGY ON COLLEGES

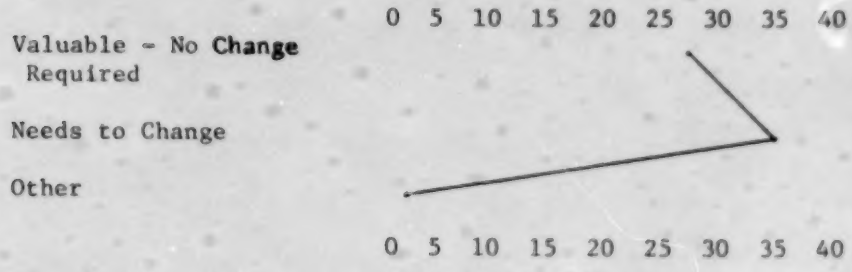

0 1 2 3 4 5 6 7 8 9 10
There is a need for more computer science courses
There is a need for more computers and high technology equipment
There are more mathematics courses
There are more physics courses
There is a need for general curriculum review
New content and instructional changes are needed
Establishment of a computer center
Considering computer literacy requirement
More computer courses chosen as electives
More use of computer in instruction
Inclusion of at least one data processing course in the occupational major
0 1 2 3 4 5 6 7 8 9 10

In summary, Table 7 represents the importance of high technology on college-wide planning for the future. It is obvious that there is a need for a general curriculum review and consideration of a series of actions in areas impacted by computer science.

The most important question of the survey relates to measuring the need for change. Without any doubt, respondents convey the message to the American community, junior, and technical colleges that the associate degree needs to be studied and developed, as indicated in Table 8.

TABLE 8

COLLEGES ATTESTING TO THE VALUE OF THE ASSOCIATE DEGREE BY NUMBER OF RESPONDENTS



"Valuable - No Change Required" includes the opinion of 36 percent of the colleges that recognize the value and adequacy of requirements of the associate degree, and do not suggest any need for present change.

"Needs to Change" indicates change in areas such as: Needs more structure; more course work; lacks

rigor and integrity in general education; needs more general education; too many choices in the area of general education; needs more specific competencies; needs to be updated; needs more computer courses; needs to improve articulation of degrees with similar bachelor degree programs; too much specialization in occupational degrees; it is undervalued by administrators; too specific at most colleges; needs better qualified high technology teachers.

The "Other" one percent of the respondents express the concept that radical changes during the sixties and seventies have not served the community well. Also expressed by this group was the view that associate degree programs are still the most effective way to offer skill training and upgrading.

If there is a need for change, what are the priorities that community colleges are interested in considering?

Both the high schools and the business corporations sampled in the survey suggested that to rely on the prestige of the past accomplishments is just not practical.

Only 8 percent of the business respondents recognized the prestige of the associate degree; 91 percent indicated that the most important significance of the degree is its impact on preparation for a career and its help in personal development. Sixteen percent identified the degree as an opportunity for intellectual development; the same percentage of respondents suggested that the degree is helpful in maintaining job security. Eight percent emphasized the degree's monetary value; and, finally 8 percent did not recognize any significance of the associate degree in the corporate world.

On the other hand, 21 percent of the high school respondents recognized prestige in the associate degree; 41 percent, the intellectual development it entails; 62 percent, personal development; 55 percent, the monetary potential it suggests; 86 percent, the career preparation it represents; 41 percent, the job security it provides; and 10 percent, the good bargain it is.

The present business priorities in rank order are: To develop career related skills; to instill the ability to acquire and actualize knowledge; to facilitate the mastery of communication skills; to encourage the use of personal knowledge and experience in individual development and to develop responsible members of society.

TABLE 9

PRIORITIES OF COMPETENCIES PERCEIVED BY COLLEGES AS SIGNIFICANT IN THE DEVELOPMENT OF AN ASSOCIATE DEGREE

Competencies	Current Mean Rank	Priority Rank	Should Be Mean Rank	Priority Rank
a. To instill the ability to acquire and actualize knowledge.	2.19	2	2.03	1
b. To facilitate the mastery of communication skills.	2.73	3	2.53	2
c. To promote the appreciation of one's own cultural heritage and that of others.	4.92	7	4.18	5
d. To infuse the ability to collectively, as opposed to individually, pursue the analysis and solution of problems.	4.72	5	4.61	6
e. To stimulate the awareness and to develop the concern for contemporary events, issues, and problems.	4.88	6	4.97	7
f. To encourage the use of personal knowledge and experience to develop individually and as a responsible member of society.	4.17	4	3.56	3
g. To develop career-related skills.	2.07	1	3.57	4

A lower rank indicates higher priority.

Table 9 indicates that the current priority rank is as follows: First, g.; second, a.; third, b.; fourth, f.; fifth, d.; sixth, e.; and seventh, c.

The should be priority rank is: First, a.; second, b.; third, f.; fourth, g.; fifth, c.; sixth, d.; and seventh, e.

TABLE 10

RANKING AND PRIORITIES SHIFTS OF COMPETENCIES

Ranking Shifts			Priorities Shifts		
Priority	Current	Should Be	Priority	Current	Should Be
a.	2	1	a.	2	1
b.	3	2	b	3	2
c.	7	5	c.	7	5
d.	5	6	d.	5	6
e.	6	7	e.	6	7
f.	4	3	f.	4	3
g.	1	4	g.	1	4

According to Table 10, Competency a., to instill the ability to acquire and actualize knowledge, deserves a higher priority, as well as, b., to facilitate the mastery of communication skills; c., to promote the appreciation of one's own cultural heritage and that of others; and, f., to encourage the use of personal knowledge and experience to develop individually and as a responsible member of society.

Competencies d., to infuse the ability to collectively, as opposed to individually, pursue the analysis and solution of problems; e., to stimulate the awareness and to develop the concern for contemporary events, issues, and problems; and g., to develop career-related skills, should enjoy a lower priority.

TABLE 11

PRIORITIES OF COMPETENCIES PERCEIVED BY BUSINESSES AS SIGNIFICANT IN THE DEVELOPMENT OF AN ASSOCIATE DEGREE

Competencies	Mean Rank	Priority Rank
a. To instill the ability to acquire and actualize knowledge.	1.8	1
b. To facilitate the mastery of communication skills	3.2	3
c. To promote the appreciation of one's own cultural heritage and that of others.	5.4	6
d. To infuse the ability to collectively, as opposed to individually, pursue the analysis and solution of problems.	4.3	4
e. To stimulate the awareness and to develop the concern for contemporary events, issues, and problems.	6.3	7
f. To encourage the use of personal knowledge and experience to develop individually and as a responsible member of society.	4.9	5
g. To develop career-related skills.	2.0	2

Table 11 represents the priorities of competencies that should be taken into account in the development of an associate degree program as viewed by the respondent businesses.

Businesses recommend that the competency to acquire and actualize knowledge be given the highest priority followed by the competencies to develop career-related skills, to facilitate the mastery of communication skills, and to infuse the ability to collectively, as opposed to individually, pursue the analysis and solution of problems.

Table 12 represents a comparison of the businesses' ranking and the colleges' ranking of priorities of competencies that should be taken into account in the development of an associate degree program.

TABLE 12

COMPARISON OF BUSINESSES' AND COLLEGES' RANKING

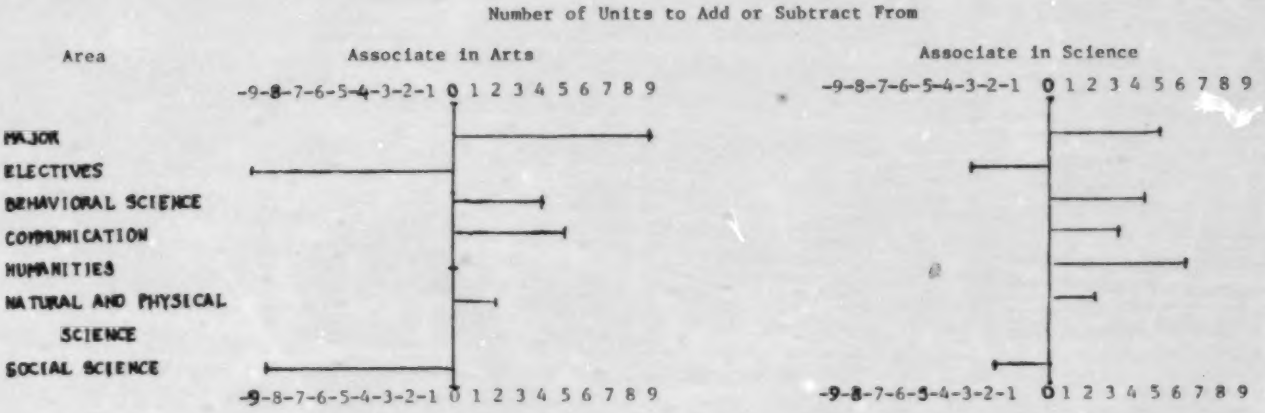
Competencies	Business Ranking	College Ranking
a.	1	1
b.	3	2
c.	6	5
d.	4	6
e.	7	7
f.	5	3
g.	2	4

An analysis of Table 12 indicates that businesses agree with colleges in priorities a., to instill the ability to acquire and actualize knowledge, and e., to stimulate the awareness and to develop the concern for contemporary events, issues, and problems, and disagree with the rest of the ranking. Priority d., to infuse the ability to collectively, as opposed to individually, pursue the analysis and solution of problems, and g., to develop career-related skills, are of higher priority for businesses. Priorities b., to facilitate the mastery of communication skills; c., to promote the appreciation of one's own cultural heritage and that of others; and, f., to encourage the use of personal knowledge and experience to develop individually and as a responsible member of society, represent a lower priority for businesses.

Table 13 indicates the proposed changes recommended by the seventeen colleges that did not agree with the present units required for the associate in arts and associate in science degrees.

TABLE 13

RECOMMENDED CHANGES FOR THE ASSOCIATE IN ARTS
AND ASSOCIATE IN SCIENCE DEGREES



An analysis of Table 13 indicates that there should be a greater increase of units under the Major and Communication in the associate in arts degree than the associate in science degree; a greater reduction of units under Electives and Social Science, and an equal amount of units under Behavioral Science. In the area of Humanities, there is no increment or reduction suggested for the associate in arts degree. However, an addition of six units is recommended for the associate in science degree.

Reviewing the same question in the high school survey, we find the following recommendations:

TABLE 14

RECOMMENDED CHANGES FROM THE HIGH SCHOOLS

Academic Area	Increase %	Decrease %	No Change %
General Education Units	47	11	42
Major Units	81	0	19
Elective Units	25	6	69
*Other Units	3		

*Specialized programs

A comparison of Tables 13 and 14 indicates that there is a positive correlation between the recommendations made by the colleges and high schools as they relate to the increase of units under subjects of general education with the exception of social science where colleges suggest a reduction in units. There is consistent agreement among colleges and high schools about the increase of units under the Major.

Only 25 percent of the respondent high schools recommended an increase of elective units and 69 percent suggested no change, whereas the respondent colleges recommended a reduction of elective units for both the associate in arts and associate in science degrees.

Suggestions to improve the associate degree received from businesses are represented in Table 15.

TABLE 15

BUSINESSES' RECOMMENDATIONS FOR CHANGE

Areas of Improvement	Mean Rank	Rank
a. More emphasis on the basic skills of reading, mathematics, and oral and written communications.	1.7	1
b. More emphasis on data processing and/or interpretation (computer technology).	2.8	3
c. More emphasis on training in the emerging fields of high technology.	2.3]	2
d. More emphasis on specific job-related skills.	2.3]	
e. More emphasis on solving the major problems in society.	5.0	5
f. More knowledge of environmental issues.	4.8	4

In analyzing Table 15, it is evident that the highest priorities for business, as they relate to the improvement of the associate degree, are a., b., and c. Thus, more emphasis should be placed on the basic skills of reading, mathematics, and oral and written communication; training in the emerging fields of high technology; and, data processing and/or interpretation. The lowest priorities are on placing more emphasis on solving the major problems in society and in acquiring more knowledge of environmental issues.

IV

OPINIONS, PLEASE:
A Forum of Viewpoints

In light of the high degree of interest in issues such as general education, academic standards, and competencies among survey respondents, it is of benefit to review a forum of viewpoints from others knowledgeable about these and other aspects of the associate degree.

Presented here are the opinions of state higher education officers, representatives of educational associations, professors of higher education, high school principals and counselors, and community college faculty and administrators who responded to the survey. Their comments indicate the diversity of opinion concerning the associate degree as it is and as it should be.

State higher education officers, association directors, and university professors noted that the associate degree indicates solid academic accomplishment and the acquisition of practical vocational skills.

For example, David M. Otis, Executive Director of the Higher Education Planning Commission of the State of Vermont, said that the associate degree is "one of the great educational bargains of our time, particularly since a number of young people who earn the degree obtain good jobs with better pay and prospects in only two years than many graduates of four-year programs."

The degree provides a sense of immediate accomplishment for "many students who are not initially sure about their total educational goals and have, perhaps, a low academic self-image," said John B. Duff, Chancellor of the Massachusetts Board of Regents of Higher Education.

Chancellor Duff noted that, for many, their low self-image is improved by their success in the community colleges, adding that 40 percent of Massachusetts associate degree holders immediately continue into baccalaureate programs.

For other students, the degree offers "a legitimate point to 'get off the train,'" according to James L. Wattenbarger, Director of the Institute of Higher Education at the University of Florida, who added that it is "viewed as a milestone in an individual's progress toward becoming an educated person."

In agreement was R. Wayne Richey, Executive Secretary of the Iowa State Board of Regents, who noted that the recognition of the degree is "extremely important and beneficial to students," especially those who find it accepted as completion of lower division work by four-year institutions.

"The associate degree has been accepted and is held in high esteem," said Harry Snyder, Executive Director of the Kentucky Council on Higher Education, adding that "it has served higher education well."

He explained that, in his state, "the pre-baccalaureate programs provide ready access to large numbers of students, and enrollments are growing.

"An increasing number of successful applicants to professional schools begin their academic careers in (Kentucky's) community colleges, and then complete their preparation at a four-year institution." Mr. Snyder added that two-year technical programs are also growing "and have been successful in meeting our manpower needs for trained technicians and semi-professionals."

"Kentucky needs to itensify its efforts at this level," he emphasized.

Praising the associate degree's usefulness was Donald J. Nolan, Deputy Commissioner for Higher and Professional Education of the New York State Education Department, who said it has been "serving the purposes of the postsecondary community as it seeks to be responsive to changing educational, social, and economic needs."

According to Deputy Commissioner Nolan, New York trends are consistent with the rest of the country, with steady increases in the number of associate degrees awarded in the 1970s. New York's distribution of degrees also follows trends found elsewhere, with "an increasing proportion being granted in the technological areas rather than in the pre-baccalaureate liberal arts and sciences."

Florida's James Wattenbarger pointed out that his state's general education articulation agreement between two- and four-year institutions "constitutes a major building block in the systems' intrarelationships."

Another state offering well-established articulation agreements between two- and four-year institutions is Iowa, in which the Regent universities -- the University of Iowa, Iowa State University, and the University of Northern Iowa -- "have established a transfer agreement with the area schools which provides full recognition for the associate degree."

R. Wayne Richey, of Iowa, said this recognition is "extremely important and beneficial to the students transferring from the area schools to four-year institutions," and added that there is a need for continuing dialogue between the two- and four-year institutions "to identify additional needs or concerns and provide for on-going discussion of the desirable features of the transfer agreement."

And Gladys Meier, Registrar of the University of Wisconsin's Center System, reported that six universities within the state's system and two private colleges in Wisconsin accept the associate degree as meeting their basic studies, or liberal education, requirements.

"This is a distinct advantage to students transferring to those schools for the bachelor's degree," she wrote.

Massachusetts' Chancellor Duff noted that "with the imminent establishment of statewide minimum admissions standards for the public baccalaureate colleges and universities in Massachusetts, the two-year colleges with continued open admissions will increasingly become an alternative route to the four-year degree."

Edward Moulton of the Ohio Board of Regents noted that the associate degree occupies a vital place among the various recognitions conferred by Ohio colleges and universities, and the associate in arts "signals a student's preparedness to enter a baccalaureate program at the junior level."

Roy Carroll, Vice President of Planning for the University of North Carolina, wrote that "the nature of the associate degree has been widely accepted and generally understood" in his state. The University places particular attention on transfer and articulation in regard to the degree, with a "Joint Committee on College Transfer Students, which is made up of representatives from the public senior institutions, from the public community colleges and technical institutes, and from the private junior and senior institutions."

That commission "issued guidelines for transfer and for interpretation and implementation of credit offered by transfer," said Vice President Carroll. "Those guidelines provide a definition or description of the associate in arts and associate in science and outline the principal purpose and focus of the general education components of programs leading to those degrees."

Voicing interest in the issue of degree standards was Jack Tebo, Supervisor of the Florida Postsecondary Education Policy Unit. While the associate in science and associate in arts degrees are practical and useful, he said, the work done "should be of sufficient rigor to allow subsequent continuation of the pursuit of a higher level degree, should that be the choice of the recipient."

And Norma Foreman Glasgow, Commissioner of the Connecticut Board of Higher Education, replied that "infusion of a liberal arts or general education component for the degree is of particular importance, to assure achievement of competencies in reading, writing (communication skills), mathematical concepts, and analytical skills."

She stressed the conviction that "skill training, absent basic competencies, can assure early obsolescence of skills and inability to retrain and learn new skills."

Concurring was Howard Boozer of South Carolina, who wrote, "I hope that as your task force reevaluates and redefines the associate degree, it will make every effort to see that standards of quality are set that are meaningful."

R. Wayne Richey of the Iowa State Board of Regents also expressed support for the task force's plan to provide recommendations concerning competencies to be achieved as part of the degree program.

The importance of academic standards was stressed by Ohio's Chancellor Moulton, who wrote, "My concerns

with the associate degree are the same concerns I have expressed regarding all other aspects of the academic enterprise. I believe the integrity of all our degrees and credits is under threat from a variety of sources.

"Cheap credits awarded for undocumented 'educational experiences' cheapen the degrees to which they are applied. Courses offered at locations remote from college facilities, by adjunct faculty having little or no contact with the full-time faculty of the sponsoring institution raise serious questions as to the comparability of credits earned at such sites.

"In short, the quality of higher education from the associate to the doctoral level is being steadily eroded. If such erosion continues, none of our degrees will be worth much."

And Richard L. Davison, Associate Commissioner for Curriculum and Research of the North Dakota State Board of Higher Education, questioned the "precise objectives" of the degree, noting that "it is poorly defined in our state and has little or no consistency from one institution to another."

"It is even difficult within an institution" to arrive at consensus, he said.

Another citing lack of uniform standards was Kentucky's Harry Snyder, who pointed out that "some institutions confer an associate degree whenever an individual has accumulated 60 to 65 hours of college work" whether or not a formal program was adhered to. "And, in the same vein," he said, "some institutions confer associate degrees in technical areas when no advanced work has been completed at the college level."

And John Roueche, Director of the Program in Community College Education at the University of Texas at Austin, said that there is great cause for concern over quality and excellence in community college degree programs.

Basing his remarks on the results of two national studies the center has just completed, Dr. Roueche said that community colleges "have lost the qualitative aspects of our offerings--and especially so in the Associate Degree-Humanities area."

Citing results that indicate a lack of reading and writing assignments in degree programs, he said that

"students do more reading and writing--and at higher quality levels--in technical programs than can be found anyplace in the Humanities division."

Also sounding a warning was Mark Curtis, President of the Association of American Colleges, who mentioned the danger of "allowing various outside pressures, and perhaps personal predilections, to divert ... attention from (the) basic responsibility" of making "equal educational opportunities meaningful."

Expressing statewide confusion over the role and significance of the associate in applied science degree was Lee R. Kerschner, Executive Director of the Colorado Commission on Higher Education. "We have no problems with the associate in arts and the associate in science degree," he wrote, but problems with the associate in applied science include lack of "clear guidelines for deciding which courses are appropriately general education," as well as lack of clarity as to the relationship between the degree's vocational and general education components, and as to the transferability of such courses.

"The Commission is not convinced that the A.A.S. degree is worthy of being classified as an 'academic' degree," he concluded.

Alabama's William Blow said he is "somewhat concerned that the associate degree titles will proliferate to the same extent that baccalaureate and graduate degrees have," and he suggested it might be worthwhile to designate all vocational/career--that is, non-transferring--programs by a single degree title, such as associate in applied science.

Concurring was Howard Boozer of South Carolina, who wrote, "We are concerned over the proliferation of degree titles--e.g., associate in agriculture, associate in health science, associate in industrial technology, associate in occupational technology--which have replaced the associate in applied science as the degree title most commonly used for programs of a technical or vocational nature.

"It appears also that some programs which should lead to diplomas or certificates have been given associate degree status only as a reaction to societal pressures,"

he wrote, adding that "this has the result of down-grading the associate degree and watering down the general education component that should be an important part of any degree program."

Perhaps the widest array of associate degrees mentioned by any respondent was that cited by Edward Moulton from Ohio, who noted that the two-year degrees authorized to be awarded by public institutions include the associate in arts and science, and the associate in applied science and applied business, as well as associates in technical study, individualized study, and labor studies.

Also suggesting the need for more agreement on the meaning of degree titles was William S. Fuller, executive director of the Nebraska Coordinating Commission for Postsecondary Education.

"All sectors of postsecondary education should study and evaluate the current use of degree titles and the broad academic requirements for the completion of degrees in order to achieve commonality of use between sectors and to ease the transfer of students with common program objectives between sectors," he wrote.

He believes "it is possible for the academic community to discern both the intent of the degree program and the expected requirements from the use of appropriate degree titles," adding that "perhaps even the 'real world' will benefit from a consistent use of such titles."

William Blow of Alabama's Commission on Higher Education remarked that there is "a great deal of concern as to what type of institution should offer the associate degree," explaining that "in Alabama, junior/community colleges, postsecondary technical institutes, and some universities offer such degrees."

In Kansas, there are "a limited number of two-year associate degree programs at the state universities," according to Stanley Z. Koplik, Executive Director of the State of Kansas Board of Regents. "That Board has adopted the policy of approving two-year programs at our four-year institutions only when our institutions have a unique strength in areas not otherwise available through established two-year programs."

The tendency to relate the associate degree to second-class status must be due to the fact that the degree is

awarded primarily by community colleges, said Alexander Astin of the Higher Education Research Institute at the University of California, Los Angeles.

He suggests that having four-year institutions award the same degree to their undergraduates after they complete an appropriate array of undergraduate courses "would help immensely to relieve this problem," and added that he is "glad to hear that AACJC is going to take a look at the associate degree."

Also advocating the awarding of associate degrees by four-year institutions is Allan Ostar, President of the American Association of State Colleges and Universities, who said that such a practice would be "highly desirable and educationally sound."

This practice would encourage greater flexibility, facilitate transfer from one institution to another, permit stopping out and reentry without loss of credit, focus attention to the career ladder concept in curriculum development, and give greater legitimacy to the associate degree in postsecondary education, he said.

Addressing the issue of associate degree programs in four-year institutions, Eugene T. Woolf, Associate Commissioner for Academic Affairs of the Iowa State Board of Regents, cited a study indicating that "community-technical colleges and community colleges are better designed to address the increasing lower division enrollments ... because they are the most economical way to educate larger numbers of students; they provide the dual option of a vocational-technical education or a college-parallel program on the same campus; they provide the necessary remedial work or maturing time for students who are not ready or prepared for a university; they provide unbiased and more personal counseling; the faculty are more geared to the lower division student since this is their 'raison d' etre,' and the two-year colleges already have the space available."

There are three main values for those who earn the associate degree, according to responses from high school counselors and principals: job training and certification, preparation for transfer to a four-year institution, and personal satisfaction.

The counselor from Bennett High School in Buffalo, New York, said his recommendations to students concerning

the degree focus on "university parallel programs and (preparation for) careers."

Community college associate degree programs are "highly desirable" in some career fields, said the spokesperson for Madison Memorial High School in Madison, Wisconsin.

The guidance department chairperson at Wayne Valley High School in Wayne, New Jersey, sees the degree "as a means to an end, in terms of transfer, as well as being an end in itself."

The head of the guidance department of Fayetteville High School in Fayetteville, Arkansas, sees the advantage of community college associate degree programs as providing "short-term training to learn a vocation or technical skill or to help (students) identify their long-range goals." And the principal of Highland High School in Salt Lake City, Utah, says the main advantage is pursuing education in a "small school" environment.

The principal of Los Alamos High School in Los Alamos, New Mexico, said associate degrees and community colleges are good for some high-tech work.

Also stressing the job preparation aspect was the counselor from Bowling Green High School in Bowling Green, Kentucky, who said the degree "is designed to allow the student entry in the job market with a concentrated area of study in a specific job area."

The associate in arts degree is "a milestone or stepping stone" and "nice to have, in case further study is not possible," said the principal of Bismarck High School in Bismarck, North Dakota, who added that the associate in applied science is "not often a stepping stone to further study."

Strong points of the associate degree are job entry and transfer value, said the principal of Memorial High School in Tulsa, Oklahoma, who said it is an advantage for students to be able to earn the degree while living at home and working part-time.

The principal of Washington High School in Kansas City, Kansas, said, "The associate degree curriculum has been expanded and is being expanded each year to fit the needs of the community and its vast diversification. As the community changes, so does the community college.

Emphasis is placed on job opportunities. Keeping up with new training and technology and development of new skills for job changes are stressed.

"The associate degrees provide a two-year program terminating the formal education at that time with emphasis upon continuation as the need arises," said the Kansas City principal.

Students who transfer to the University of Hawaii from local community colleges usually spend three--instead of two--years earning the associate degree, replied the counselor from Kalaheo High School in Kaulua, Hawaii.

"We assure students that this is not necessarily a handicap, since the transfer students from the local community college have a better record in grade point average for the last two years than does the entire school upper-classmen population," said the Kalaheo counselor.

Also stressing the advantage of the associate in arts in articulation was the director of guidance at West High School in Davenport, Iowa, who said the degree is "what you obtain on the way to a B.A.--if you follow a

prescribed curriculum. Many of the four-year institutions will accept the A.A. as having satisfied freshmen and sophomore requirements and will admit the transfers to junior status."

In summary, high school principals and counselors see value in the associate degree in terms of job training and academic preparation for transfer to a four-year institution.

Community college administrators and faculty commented on a large variety of issues relating to the associate degree.

Gwendolyn W. Stephenson, Vice Chancellor for Planning and Academic Affairs at St. Louis Community College, wrote that "the associate degree, as it exists today, is probably one of the most effective ways of addressing the needs of U.S. citizens for skills training and upgrading, especially in high technology, and it also provides a low-cost way for students to acquire the first two years of a baccalaureate degree."

Concurring was Dr. Robert C. Kingston, Dean of Instruction at Foothill College, Los Altos Hills, California, who called it "well-balanced and useful."

Donna D. Briggs of Massasoit Community College, in Brockton, Massachusetts, said that "the associate degree answers the need in society for two-year level degree options as well as for the corresponding content areas and levels of learning.

"Associate degrees are useful for the student pursuing additional learning at the four-year level, and for those wishing immediate access to employment," she added.

Washington State associate degree holders find the degree "a very good basis" for general education and "meeting the first two-year requirements of most four-year institutions. It allows students to transfer at junior standing," wrote Jefferson E. Overholser of Spokane Community College.

There is increasing pressure on the associate degree to provide immediately marketable skills, reported Massachusetts Bay Community College, adding that "education for the job market is widely preferred."

Elmo Roesler, Director of Planning and Evaluation of Instructional Programs and Student Services at Virginia

Community College System, saw the degree as valuable to those seeking immediate employment.

"The occupational/technical emphasis at the associate degree level assures students that skills learned in these programs are job-relevant and marketable," he said.

But R. Brightman of Coast Community College District in Costa Mesa, California, replied that the degree, as it now stands, is "often too narrowly occupation," while John Buller of Coastline Community College emphasizes the need for the degree to be "sold" to business and industry as a measure of competence and performance.

Winston H. Lavallee, Assistant Dean of Holyoke Community College in Holyoke, Massachusetts, said the degree "often is as valuable in the occupational arena as a bachelor's degree.

"We note a number of bachelor's degree holders coming to us for training," he said, adding that "unfortunately, both upper level academia and some industries still subscribe to the belief that any bachelor's degree is superior to the associate degree."

Citing the need for competencies and standards for the associate degree was Ben W. Carr, Jr., Vice Chancellor of the University of Kentucky Community College System.

"Much review is occurring concerning competencies of graduates, general studies versus technical courses, articulation from below and upward, etc.," he replied. "The associate degree is here to stay, but many changes may occur over the next few years in how the degree is defined and earned."

Also concerned about academic standards was Shirley Kelly of City College of San Francisco, who wrote, "The associate in arts degree has, in many instances, been given without sufficient college-level work being required. While it is important to realize that there should be a difference between the requirements for the associate in arts and the requirements for the first two years of college, it is necessary to keep the A.A. requirements of sufficiently high level to command respect."

Another proponent of competencies was Dr. Anthony D. Calabro of Truckee Meadows Community College in Reno,

Nevada, who wrote that "the associate degree ... should reflect specific competencies," which would "help give the degree a renewed credibility."

The degree "needs to be more specific and more competency-based to be of any real value to students," observed Charles Carlson of Bakersfield College in Bakersfield, California.

"The degree needs to be strengthened by coursework that equips the graduate with analytical and evaluative tools," pointed out William J. O'Mahoney of Oakland Community College in Michigan.

Brenda Beckman of Delta College in University Center, Michigan, finds the degree "a sound educational base on which to build for most purposes," but warned that "many occupational degree programs tend to lean toward skill development at the expense of general education components that may have longer term value.

"The degree will need to be reviewed more frequently as to the impact of changing technologies, which affect every facet of the learning experience and the values on which it is based," said Ms. Beckman.

Citing the time limitations of the degree was Floyd Elkins of Cedar Valley College in Lancaster, Texas, who replied that "students can only master so much in two years."

Lack of definition between various associate degrees was cited as a disadvantage by H. Victor Baldi, Vice President of Instructional Administrative Affairs at Indiana Vocational Technical College. He prefers the title of associate in occupational studies "for most occupational programs in two-year colleges and would like to see greater acceptance for its use."

Citing the need for more general education was John F. Bancroft of San Bernardino Valley College in San Bernardino, California, who wrote, "There continues to be too much emphasis upon the accumulation of facts and too little emphasis upon insight, understanding, and the development of individual empowerment."

And Barry L. Mellinger of Mississippi Gulf Coast Junior College in Perkinston, Mississippi, said he is "concerned that the integrity of the associate degree is threatened. For example," he added, "there appears to be

little concern generally for retaining sufficient general education requirements for graduation and for awarding the degree for 'non-collegiate' vocational programs."

John Gazda of Metropolitan Community Colleges in Kansas City, Missouri, wrote, "Radical changes in degree requirements instituted during the '60s and '70s to reflect the social change of the period have not served the community college well "

Alfred M. Philips, president of Tulsa Junior College in Tulsa, Oklahoma, said the traditional associate degree requirements "should be updated in area specifications and course content to comply with the current demands."

What a rainbow of viewpoints!

If some order is to be made out of such a collection of opinions, a systematic theory of the associate theory is desirable.

The ideal associate degree reflects a curriculum which combines the student's interests and abilities with a continuous choice of career goals and experiences--programs through which those careers goals can be pursued.

V

ADVANCING THE ASSOCIATE DEGREE:
An Agenda for the Future

"When allowances are made for the large number of part-time students, the higher risks involved in the Open Door admission policy, and the large number of students enrolled in less than two-year programs, the statistical data on degrees are encouraging to those who favor their award (emphasis added)." [35]

John Lombardi made this observation in 1980 at the conclusion of his excellent study on the question, "What's Happened to the Associate Degree?"

Interestingly enough, a growing number of universities and liberal arts colleges offer an associate degree certifying the successful completion of various programs obtained in the first two years.

In the United States, more than 50,000 associate degrees are awarded annually in institutions other than community, junior, and technical colleges.

There are suggestions from American higher education community that "it would be desirable to require the associate's degree be granted everyone pursuing a bachelor's degree. If such a recommendation were accepted, institutions might make the first two years of college radically different from the second two years; the danger could be minimized through institutional action."[36]

The proliferation of the associate degree in other than two-year colleges is of serious concern to all "who favor their award."

This is a "happy problem" because it underlines the relative success of the associate degree in the American community, junior, and technical colleges.

On the other side of the issue is the birth of new associate degree programs of a "four-year" nature. For example, Kern County Community College District in

California, in cooperation with the Kern High School District, is proposing a four-year degree program. It would begin with the eleventh grade and conclude after two years of study in the community college. James C. Young, Chancellor of Kern Community College District, commented that, "By working closely with the high schools, the magic line would not be drawn between grade 12 and grade 13!"

State higher education officers in particular are concerned about the proper interpretation of the associate degree, reflecting a significant shift in policymaking from local colleges to state agencies.

Gerald Hayward, Chancellor of the California Community Colleges, recently appointed a statewide Task Force on Academic Quality. This group will study and make recommendations on a number of issues vital to the community colleges, including criteria appropriate for the associate degree, as well as the need for student assessment and advisement.

The faculty and administration of the Los Angeles Community College District just developed a new associate

degree program with a strong competency base requiring testing in reading, written expression, and mathematics.

This report by the Task Force for the Redefinition of the Associate Degree examined the heart of the community college mission and found that the associate degree is alive and well.

The survey itself and comments from professionals from the field raise a number of issues relevant to the present status of the degree with potential consequences for the future.

First of all, while the associate degree is enjoying popularity, it is in need of further review and experimentation, particularly in areas such as high technology, data processing and interpretation, and applied mathematics.

Second, the traditional prestige of the associate degree is not among its strongest advantages. The degree is more appreciated in career preparation and personal development, especially by those students who need a sense of immediate accomplishment.

Third, the survey indicated that the degree's monetary potential and job insurance are not witnessed by the participating companies.

Fourth, there is such a variation in subject area and unit requirements that universities and colleges prefer to stick to their own transfer requirements than accept the associate degree as qualifying students for transfer.

Fifth, high technology is not only affecting the curriculum but is precipitating an institutional metamorphosis. In many instances, colleges' refusal to acknowledge this phenomenon can result in deterioration of preparation for careers in technical areas.

Sixth, colleges and businesses agreed that acquisition and actualization of knowledge and the mastering of communication skills are of very high priority. Special attention was given to the need for more emphasis on basic skills, data processing and interpretation, special job-related skills, and high technology training.

Seventh, all sectors surveyed required more attention to competency. It was suggested that colleges should work with business and industry to identify needed competencies. The competency-based associate degree, with testing throughout the program from entry to graduation, would enhance the graduate's success in careers where standards are recognized as predetermining factors in the preparation itself.

Eighth, honors programs are offered in only 28 percent of the polled colleges, and the differences between standard and honors courses suggest quality variation.

Ninth, the associate degree definition is fragmented or non-existent in most of the surveyed colleges.

Tenth, in terms of required change, more than half of the respondent colleges said that they would like to see more vigor in educational offerings, particularly in terms of general education, as well as more structure in curriculum with more course work and more specificity in degree designation.

They also indicated the need for much better articulation with four-year institutions.

The greatest need identified in the survey is the development of a larger variety of high technology programs as a response to society's needs.

Seventy-one percent of the respondents indicated that high technology has already influenced their curriculum and that new programs should be developed.

The National Science Foundation, in one of its "think papers," introduces new educationa alternatives for support of technology. The Foundation paper stressed the need for technology as an integral part of education. The reference was also made to the use of cognitive skills in nonacademic settings, which is so important in associate degree applied schiences.

Dale Parnell, President of the American Association of Community and Junior Colleges, advocates a new degree "which would be characterized as a 'liberal-technical' degree. There are some great underlying commonalities

of knowledge, skills, and understanding that support the world of technology, i.e., Design, Control Systems, Electronic Systems, Fluid Power Systems, Mathematics, Science, and Literary."

Synthesis of findings indicate that the associate degree would be more highly valued with certain modifications in the way it is defined and conferred.

The first recommendations are directed toward strengthening the quality of the associate degree in order to improve its relevance and value to the student, the employer, and the four-year institution to which the degree-holder may wish to transfer.

It is clear that associate degree coursework cannot be either relevant or valuable to the student if it is outside the realm of his or her abilities. The development of mandatory testing, along with advisement to developmental courses for those demonstrating a need for such assistance, is therefore recommended as a basis upon which all other improvements can be built.

Next, it is recommended that competency standards be developed for all students seeking the associate degree.

They should reflect consistently high standards, with progress from one level of the program to another monitored in terms of carefully evaluated performance. Testing throughout the degree program would insure that high standards are reached--and maintained.

The quality of the degree depends, more than anything else, upon the excellence of the faculty. It is recommended that a new liaison be established with the universities to improve the quality of our existing teaching corps, and to develop a pre-teaching program to suitably equip those instructors who will be coming to community colleges in the future.

In vocational education programs, maintenance of faculty quality should also involve development of opportunities for faculty to return to business and industry on a pre-determined time schedule to sharpen and update their skills and expertise.

Professional development for faculty in their own subject matter is also recommended, along with fostering appropriate methodology to equip faculty to teach effectively in a highly heterogeneous classroom environment.

Improvement of the associate degree as an educational credential will also require recognition by vocational program instructors of the importance of liberal learning, as well as participation by all faculty in establishing and maintaining consistently higher standards.

Colleges must also move from a climate of student self-advisement to a carefully planned and executed counseling process, with the emphasis placed on successful transition to the workplace or a four-year institution.

It is also recommended that counseling and advisement be enhanced with the appropriate technology, including use of computer programs providing information on opportunities and requirements within specific employment categories.

Recommended, too, is the establishment of associate degree committees at each college to work with faculty, students, four-year institutions, as well as business, industry, and labor groups, Activities could focus on such issues as counseling, orientation, matriculation, and collaborative efforts.

Improved relationships with business, industry, and labor could produce a wide range of benefits to all those involved, including regular review of coursework to insure relevancy, development of opportunities for student work-study programs, and the previously-mentioned opportunities for vocational faculty to periodically return to a business setting.

In addition, business and industry should recommend competency standards for those wishing to enter their field, and should also be encouraged to look for and recognize the associate degree as an indicator of successful achievement and demonstrable skills.

Business and industry involvement would also be most beneficial in the development of a new type of associate degree to meet the needs of a technologically-oriented society, which is also strongly indicated by the results of this study.

It is suggested that an appropriate designation for such a degree would be <u>associate in high technology</u>, and further suggested that its specifications be designed after careful consultation with business and industry

to insure recognition of, and appreciation for, the skills and competencies of its bearer. This degree could incorporate elements of both liberal and technical education, recognizing society's need for individuals with background in both areas.

Recommended, as well, are efforts to attract the support of national and local foundations for studies and projects in two specific areas: first, the use of community, junior, and technical colleges as a national resource in advancing the world of work and the world of ongoing education; and second, in the development of cooperative efforts between the university, community colleges, and high schools to serve a given geographical area. The Kern Community College District project referred to earlier in this chapter is an example of this kind of cooperation.

Also recommended is ongoing study of the associate degree, with primary emphasis on development of specific competencies in the award of the associate degree, as well as appropriate secondary school preparation for those who intend to pursue it.

Continued attention and emphasis are crucial, because the revitalization of the associate degree will only be accomplished if bold steps are taken to achieve necessary change.

The best efforts are needed for, as it was recently stated in Industry Week magazine, "The one national resource without which all of the others become meaningless is the talented, competitive, questing human beings who enable civilization to achieve magnificent progress."

America's community, junior, and technical colleges are dedicated to helping all the members of our communities become just this kind of individuals--and society is now calling upon us to continue in this path with even greater effectiveness.

It is a challenge we cannot ignore.

SAMPLE OF LETTER SENT WITH SURVEY TO 100 COMMUNITY, JUNIOR, AND TECHNICAL COLLEGE DISTRICTS AND 100 HIGH SCHOOLS

OFFICE OF THE CHANCELLOR

LESLIE KOLTAI
Chancellor

LOS ANGELES COMMUNITY COLLEGES
617 West Seventh Street
Los Angeles, California 90017
(213) 628-7788

January 31, 1983

Ladies and Gentlemen:

I have been asked by the American Association of Community and Junior Colleges and the National Endowment for the Humanities to lead a task force to re-evaluate the associate degree. In order to provide a background for suggested improvements, we are presently researching the history and current status of the degree.

Because of your knowledge of two-year colleges, your participation is requested. Your cooperation in completing the enclosed form will help ensure that your concerns will have an impact upon the ensuing recommendations, and that the project itself will be successful.

Thank you for your time and consideration. For your convenience, a self-addressed envelope is also enclosed.

Sincerely,

Leslie Koltai

Leslie Koltai
Chairman, National Task Force for
the Redefinition of the Associate
Arts Degree

LK:pk
Enclosures

LOS ANGELES COMMUNITY COLLEGE DISTRICT
EAST LOS ANGELES COLLEGE • LOS ANGELES CITY COLLEGE • LOS ANGELES HARBOR COLLEGE • LOS ANGELES METROPOLITAN COLLEGE • LOS ANGELES MISSION COLLEGE
LOS ANGELES PIERCE COLLEGE • LOS ANGELES SOUTHWEST COLLEGE • LOS ANGELES TRADE-TECHNICAL COLLEGE • LOS ANGELES VALLEY COLLEGE • WEST LOS ANGELES COLLEGE

SAMPLE OF LETTER SENT WITH SURVEY TO 50 FORTUNE 500 COMPANIES

OFFICE OF THE CHANCELLOR

LESLIE KOLTAI
Chancellor

LOS ANGELES COMMUNITY COLLEGES
617 West Seventh Street
Los Angeles, California 90017
(213) 628-7788

January 31, 1982

Ladies and Gentlemen:

I have been asked by the American Association of Community and Junior Colleges and the National Endowment for the Humanities to head a task force to re-evaluate and redefine the associate degree. In order to provide a background for suggested improvements, we are presently researching the history and current status of the degree.

Because your corporation employs graduates of two-year colleges, your participation is requested. Your cooperation in having the enclosed form completed will help ensure that your concerns will have an impact upon the ensuing recommendations, and that the project itself will be successful.

Thank you for your time and consideration. For your convenience, a self-addressed envelope is also enclosed.

Sincerely,

Leslie Koltai

Leslie Koltai
Chairman, National Task Force for
the Redefinition of the Associate
Arts Degree

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SAMPLE OF LETTER SENT TO STATE HIGHER EDUCATION OFFICERS ON A NATIONWIDE BASIS

OFFICE OF THE CHANCELLOR

LESLIE KOLTAI
Chancellor

LOS ANGELES COMMUNITY COLLEGES
617 West Seventh Street
Los Angeles, California 90017
(213) 628-7788

I have been asked by the American Association of Community and Junior Colleges and the National Endowment for the Humanities to head a task force to re-evaluate and redefine the Associate Degree. The project entails analyzing the history of the degree, defining its current significance and generating recommendations regarding the issues of what the degree should represent and the competencies which should form an integral part of the degree.

Your opinion regarding the Associate Degree itself and your perception of its value would be of great help to me in developing a comprehensive report. I would appreciate hearing from you about your concerns and suggestions. You may be sure that your ideas will have an impact upon the ensuing recommendations.

Thank you for taking the time from your hectic schedule to participate in this project. I am looking forward to your reply, which I hope to receive by March 11, 1983, in order to meet committee and draft deadlines.

Sincerely,

Leslie Koltai

Leslie Koltai
Chairman, National Task Force for
the Redefinition of the Associate
Degree

LK:pk

LOS ANGELES COMMUNITY COLLEGE DISTRICT
EAST LOS ANGELES COLLEGE • LOS ANGELES CITY COLLEGE • LOS ANGELES HARBOR COLLEGE • LOS ANGELES METROPOLITAN COLLEGE • LOS ANGELES MISSION COLLEGE
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A Sample of Associate Degree Definition As Provided By the Indiana Vocational Technical College

5. The curricula for all technologies and programs will be standard College-wide. Regional variations will be authorized as essential to meet local needs.

6. Occupational objectives may dictate that courses or the sequence of courses which lead to a Technical Certificate may be different from those which lead to an Associate Degree.

   a. Programs will be established at one of three levels, the Associate Degree (AAS), Technical Certificate (TC) and Occupational Certificate (OC). In addition, a Certificate of Completion (CC) may be awarded for completion of separate courses.

   b. An Occupational Certificate may be awarded for any program consisting of less than 45 credits.

   c. Technical Certificate programs.

      (1) A technology may contain one or more Technical Certificate programs.

      (2) The length of a Technical Certificate program depends entirely on the occupational competencies to be learned. These programs will usually range between forty-five (45) and ninety (90) credits.

      (3) A Technical Certificate program will consist of technical courses and may consist of related education courses. The amount and level of related education included will depend upon the technical competencies that have been identified for that occupation.

      (4) The Technical Certificate program is designed to provide students depth in specific in specific technical skills and knowledge.

   d. Associate Degree programs.

      (1) A technology may contain one or more Associate Degree programs.

      (2) The Associate Degree program is designed to give both depth and breadth in technical skills and related education competencies.

      (3) An Associate Degree program is designed to provide a student with the competencies necessary to perform in an occupational area or a career.

A Sample of Associate Degree Definition . . .Indiana Vocational Technical College (continued)

(4) The length of an Associate Degree program depends on the breadth, depth, and complexity of the occupational comeptencies to be learned. The Associate Degree is the highest level of educational achievement offered by the College in an occupational area. It will be established as satisfying the requirements of time and one of the following parameters: (a) depth which involves advanced analytical and problem solving techniques, (b) breadth which involves broadening the base of the program to include an expansion of career opportunities. Associate Degree programs will usually range between ninety (90) and 120 credits.

(5) An Associate Degree program will consist of both technical and related education courses. The amount and level of related education included will depend upon the competencies that have been identified for that occupational cluster. As a general rule, an Associate Degree program will consist of:
75% technical courses (including electives)
25% related education courses (including electives)

7. A technology may contain Associate Degree programs, Technical Certificate programs, Occupational Certificate programs as well as separate or independent courses.

8. Elective courses will be provided whenever feasible to allow students to achieve individual educational goals. The extent of elective opportunity provided will vary with each technology and program, but generally the extent will be greater for Associate Degree programs than for Technical Certificate programs and Occupational Certificate programs may not provide for any elective courses.

9. It is recognized that the College curricula structure and the descriptions for instructional programs cannot reflect all of the legitimate job or career options possible within a technology or occupational area. Therefore, students, with the assistance of faculty advisors, can select from available courses (both from Ivy Tech and other sources) and arrange sequences of instruction suited to their individual needs and career objectives.

10. Instructional programs and courses will be designed and delivered to satisfy the needs of both part-time and full-time students.

11. The diagram (Attachment A) reflects schematically, the curricula development, delivery, evaluation and revision cycle.

A Sample of Associate Degree Definition As It Appears In the Catalog of Cape Cod Community College in Massachusetts

DEGREE REQUIREMENTS

Cape Cod Community College is authorized to award the degrees of Associate in Arts and Associate in Science. Degree requirements and academic standards, subject to modification, apply to all students. In order to graduate, a student must satisfactorily complete a minimum of 60 hours of academic work, at least 30 of which have been taken here. The College will consider and accept credits, subject to its standards, from other accredited institutions.

All students must file a Request for Graduation Form with the Registrar within the first few weeks of the semester in which they expect to complete their requirements. It is the student's responsibility to originate this request and failure to do so may delay his graduation. The responsibility for satisifying requirements rests with the student.

Associate in Arts

The Associate in Arts degree is awarded to graduates of general education programs who have completed a minimum of 60 credit hours and have a minimum cumulative grade index of 2.0. Requirements for this degree include a common core of courses designed to introduce every student to the major areas of knowledge and to help students improve communicative skills. The general education core and other degree requirements are:

English Composition	6
Oral Communication	3
Humanities	3
Social Science	3
Behavioral Science	3
Natural Science	3
Mathematics	3
Total core course credits	24
Other elective course credits	36
Total credits required	60

Associate in Science

The Associate in Science degree is awarded to graduates of collegiate technical programs who have completed a minimum of 60 credit hours and have a minimum cumulative grade index of 2.0. Requirements for the degree include a general education core of 20 credits which may be specified by the particular programs. In addition to the general core, students must satisfactorily complete all requirements for their particular programs [see Programs of Study]. The general education core requirements and other degree requirements are:

Basic Communication	6
Science or Mathematics	3
Social or Behavioral Science	3
Other general education courses	8
Total core course credits	20
Other course credits for a particular collegiate technical program	40
Total credits required	60

In order to expose students to a study of major ideas which influence man and society, the College requires completion of a number of general education courses in degree programs.

The general education courses which may be used to satisfy the core requirements for the associate degrees are listed below. Full details are listed in the Course Description section.

These courses also may be used to satisfy Commonwealth Transfer Compact requirements. Other college-level courses not listed below are transferable.

A Sample of Associate Degree Definition As Provided By the

New Mexico State University

ASSOCIATE DEGREE AND CERTIFICATE PROGRAMS

NMSU awards both a designated and an undesignated associate degree following completion of 66 semester credits. The last 15 to 30 credits, depending on the requirements of the college in which the degree is pursued, must be completed at NMSU or one of its branches. (Service personnel enrolled under the two-year Servicemen's Opportunity College Program may be exempt from this requirement.)

The designation *Meritorious Graduate* is awarded to the top 15 percent of the students receiving associate degrees within each college in any one academic year; the students must have completed 45 or more credits with computable grades at New Mexico State University.

Associate of Arts

Administered by the College of Arts and Sciences.

Designated Associate Degrees

The following designated associate degrees are granted to students completing the specified requirements of the degree.

Associate degree: Education Paraprofessional, administered by the College of Human and Community Services.

Associate in Applied Science, administered by the College of Human and Community Services.

Associate in Medical Laboratory Technology, administered by the College of Human and Community Services.

Associate in Nursing, administered by the College of Human and Community Services, through Carlsbad and Dona Ana Branches.

Associate in Occupational Business, administered by the College of Human and Community Services, through the Dona Ana Branch.

Associate in Prebusiness, administered by the College of Business Administration and Economics.

Associate in Radiologic Technology, administered by the College of Human and Community Services, through the Dona Ana Branch.

Associate in Secretarial Administration, administered by the College of Human and Community Services.

Associate in Water Utility Operation, administered by the College of Human and Community Services, through the Dona Ana Branch.

Other associate degrees may be granted to students completing at least 66 credits in a specific program established by the College of Human and Community Services and approved by the Academic Deans' Council and the Faculty Senate.

Associate in Agriculture, administered by the Agricultural Institute under the College of Agriculture and Home Economics.

Associate in Criminal Justice, administered by the Department of Criminal Justice in the College of Arts and Sciences.

Associate of Science in Engineering Technology, administered by the Department of Engineering Technology in the College of Engineering. Programs are offered in civil, electronic, electromechanical, and mechanical technology.

Undesignated Associate Degree

This degree, administered by the College of Human and Community Services, may be granted upon completion of 66 credits approved by the college in which the student is enrolled. Grade-point requirements are the same as for the bachelor's degree.

Certificate

Certification in Drafting, administered by the Department of Engineering Technology in the College of Engineering.

Detailed information on admission requirements, curricula, and associate degree or certificate requirements will be found in the section of this bulletin devoted to the administering department and/or college.

ACADEMIC CERTIFICATE AND ASSOCIATE DEGREE GRADUATION REQUIREMENTS

A student in continuous attendance in regular semesters and continuing in the same program may, for purpose of graduation or completing program requirements, elect to meet the graduation or program requirements in effect at the time of his/her entering the college or at the time of his/her graduating or completing the program therefrom. If the student interrupts his/her attendance, he/she will have to satisfy the catalog requirements in effect at the time of his/her readmission. Continuous attendance is defined as no interruption in regular semesters, since the student's first registration at Delta College.

Certificate requirements: Students must earn a 2.0 minimum cumulative grade point average and complete all courses listed in a certificate curriculum. Students must file an application for a certificate with the Registrar's Office during registration for the last semester of course work. All financial obligations to Delta College must be fulfilled before a student may graduate.

Associate Degree requirements: Students must complete all basic degree requirements plus specific requirements in one of the associate degrees listed. All financial obligations to Delta College must be fulfilled before a student may graduate.

BASIC DEGREE REQUIREMENTS (all degrees)

1. Earn a 2.0 minimum cumulative grade point average in a specific career curricula or a transfer curricula.
2. Earn a minimum of 60 semester hours, exclusive of Physical Education.
3. Earn two semester hours in Physical Education activity courses, unless officially exempted for one of the following reasons:
   a. Veterans having at least one year of continuous active duty.
   b. Students certified by a licensed physician as physically unable to participate and exemption approved by Delta College H P E R Division Chair.
   c. Optional for Associate in General Studies Degree.
4. Earn a minimum of three semester hours in Political Science (American Government) as required in Act 106, Public Acts of 1954, State of Michigan.
5. Earn a minimum of 24 semester hours of credit at Delta College. The student must be enrolled at Delta while earning the final credits to complete this requirement.
6. File an application for an Associate Degree with the Registrar's Office during registration for the final semester of course work.

DEFINITION OF GROUP REQUIREMENTS

Students must complete courses from at least two subject areas listed in each of Groups I, II, and III.

Group I: Humanities
Literature (ENG) 20———; Photography (PHOT) 24———; Art (ART) 25151, 152, 153, 155; Foreign Languages (FR, GE, RUS, SP) 26———, 28———, 29———, 34———; Music (MUS) 38100, 111, 112, 115; Philosophy (PHIL) 40———; Speech (SPCH) 46———; *History (HIST) 83111, 112.

Group II: Social Science
*Geography (GEOG) 74———; Economics (ECON) 81———; *History (HIST) 83———; Political Science (POLS) 85———; Psychology (PSY) 86———; Sociology (SOC) 88———.

Group III: Science
At least one class must be a lab science course.
Mathematics (MATH) 58104, 105, 110, 119 and above; Allied Health (ALDH) 68———; Biology (BIOL) 69———; Chemistry (CHEM) 71———; *Geography (GEOG) 74111; Geology (GEOL) 75———; Physical Science (PSCI) 78———; Physics (PHYS) 79———; *Sociology (SOC) 88230.

*History 83111 or 112 may be included in either Group I or II but may not be counted in both groups; Geography 74111 may be included in either Group II or III but not both groups; Sociology 88230 may be included in either Group II or III but may not be counted in both groups.

Specific major program requirements and acceptable courses within the group requirement areas differ among senior colleges and universities. It is recommended that transfer students consult with a counselor to insure that their planned course work meets the requirements for graduation from Delta College as well as specific requirements at other colleges where a student may wish to transfer.

SAMPLE OF DEGREE DEFINITION PROVIDED BY DELTA COLLEGE THAT IS PROVIDED TO STUDENTS

ASSOCIATE IN APPLIED SCIENCE DEGREE REQUIREMENTS

1 Fulfill all Basic Degree Requirements listed

2 Satisfactory completion of six semester hours in English Composition or approved equivalent

3 Satisfactory completion of all courses listed in one of the Delta College Occupational Curricula

ASSOCIATE IN ARTS DEGREE REQUIREMENTS

1 Fulfill all Basic Degree Requirements listed

2 Satisfactory completion of six semester hours in English Composition or approved equivalent

3 Satisfactory completion of eight semester hours minimum in each of Groups I, II and III according to the Definition of Group Requirements listed

ASSOCIATE IN BUSINESS STUDIES DEGREE REQUIREMENTS

1 Fulfill all Basic Degree Requirements listed

2 Satisfactory completion of six semester hours in English Composition or Business Communications

3 Satisfactory completion of all courses listed in one of the Delta College Business Occupational Curricula

ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS

1 Fulfill all Basic Degree Requirements listed

2 Satisfactory completion of six semester hours in English Composition or approved equivalent

3 Satisfactory completion of eight semester hours minimum in each of Group I and II plus 20 semester hours minimum in Group III according to the Definition of Group Requirements listed

ASSOCIATE IN GENERAL STUDIES DEGREE REQUIREMENTS

This degree is designed primarily for those students whose goal is self enrichment and who are not following a specific occupational or transfer program/curricula. It is strongly suggested that a student discuss this degree option with a counselor and consider fulfilling the Group requirements

1 Earn a minimum of 62 semester hours

2 Earn a 2.0 minimum cumulative grade point average

3 Fulfill Basic Degree Requirements listed as numbers 4, 5, and 6

ADDITIONAL ASSOCIATE DEGREE(S)

An additional Associate Degree may be earned at Delta College. Students should have a primary goal of increasing professional competencies in an occupational area. Candidates for this degree must meet the following requirements

1 Already have earned an associate, baccalaureate, or higher degree. Previously earned credits will be evaluated for transfer to this degree if they are applicable

2 After issuance of first degree, earn a minimum of 20 credit hours at Delta College

3 Satisfactory completion of a planned program in one of the following degrees: Associate in Business Studies, Arts, Science or Applied Science

4 Establish a new grade point average on the second associate degree course work with no carry-over from first earned degree

5 Fulfill all Basic Degree Requirements listed

FINAL DATES FOR COMPLETION OF APPLICATION FOR ASSOCIATE DEGREE/CERTIFICATE

DEGREE COMPLETION DATE	DEADLINE DATE FOR APPLICATION
April	1st Week of February
August	1st Week of June
December	1st Week of October

SAMPLE OF DEGREE DEFINITION PROVIDED BY MINNESOTA COMMUNITY COLLEGES

III.02.09 DEGREES AND CERTIFICATES

BOARD POLICY (5-12-81) (9-30-82)

Degrees and certificates awarded by Minnesota Community Colleges shall meet the following definitions:

Associate in Arts. The A.A. degree may be awarded for successful completion of programs primarily intended to constitute the first two years of four-year degree programs. Such programs shall include ninety to ninety-six quarter credits, at least ninety of which shall be defined as college level. Sixty credits of the total shall be in distributed liberal arts and sciences which are defined as intended for transfer. Thirty of the credits shall have been taught by the faculty of the college which awards the degree.

Associate in Science. The A.S. degree may be awarded for successful completion of technical programs which require a college setting. Such programs shall include ninety to ninety-six quarter credits, of which at least forty-five are in technical courses which are unique to the program, and at least forty-five are in liberal arts and science courses which are defined as intended for transfer. A majority of the liberal arts and science courses must be prerequisites to, or specifically supportive of, certain technical courses. Thirty of the credits shall have been taught by the faculty of the college which awards the degree.

Associate in Applied Science. The A.A.S. degree may be awarded for successful completion of occupational programs which include ninety to ninety-six quarter credits, at least thirty of which are in college level liberal arts and sciences, and at least forty-five of which are in specifically named occupational courses which are unique to the program, or to a closely related cluster of programs. Thirty of the credits shall have been taught by the faculty of the college which awards the degree. (This degree may be awarded jointly with an Area Vocational-Technical Institute if the program has been approved as a joint program.)

Vocational Certificate. The Vocational Certificate may be awarded for successful completion of those occupational programs which have been individually approved by the Board as Vocational Certificate programs, and are at least one full-time academic quarter in length but do not exceed six full-time quarters. Such programs shall have as their primary objective the placement of graduates into entry-level employment. All courses included shall be specialized occupational courses which are unique to the program or to a cluster of closely-related programs.

Certificate of Attendance. Colleges may issue certificates which are limited to documenting that a student has satisfactorily completed certain courses, where the total of these courses do not qualify to be approved by the Board for an associate-level degree nor for a Vocational Certificate. Such certificates shall not imply any level of competence for entry-level employment nor any qualification for transfer. In case of credit courses the certificate shall state the course titles and quarter credits received. In cases of non-credit courses the certificate shall state the course titles and the clock hours attended.

RESPONDENTS TO COLLEGE SURVEY

Alameda, College of
Atlanta Junior College
Bakersfield College
Brookdale Community College
Cantonsville Community College
Cedar Valley College
Central Piedmont Community College
Cerro Coso Community College
Chicago, City Colleges of
Coast Community College District
    Coastline Community College
    Golden West Community College
    Orange Coast Community College
Cuyahoga Community College District
Dallas County Community College District
Delta College
Denver, Community College of
Des Moines Community Colleges
East Los Angeles College
El Centro College
Foothill-De Anza Community College District
    De Anza College
    Foothill College
Hawaii, University of - Community Colleges
Idaho, North College
Idaho, South College
Indiana Vocational Technical College
Johnson County Community College
Kentucky, University of
Lane Community College
Long Beach Community College District

Los Angeles City College

Los Angeles Harbor College

Los Angeles Mission College

Los Angeles Pierce College

Los Angeles Southwest College

Los Angeles Trade-Technical College

Los Angeles Valley College

Los Rios Community College District

- American River College
- Consumnes River College
- Sacramento City College

Maricopa Community Colleges

- Glendale Community College
- Maricopa Technical Community College
- Mesa Community College
- Phoenix College
- Rio Salado Community College
- Scottsdale Community College
- South Mountain Community College

Massachusetts Board of Regents

- Cape Cod Community College
- Greenfield Community College
- Massachusetts Bay Community College
- Massasoit Community College
- Quinsigamond Community College

Merritt College

Metropolitay Community Colleges

Miami-Dade Community College

Minnesota Community Colleges

Mississippi Gulf Coast Junior College

Montgomery College

Nevada, University System Administration

- Truckee Meadows College

New Mexico State University

New York, State University of

Oakland Community College

Peralta Community College District

Porterville College

San Bernardino Valley College

Crafton Hills College

San Francisco Community College District

Santa Fe Community College

Sinclair Community College

St. Louis Community College Administrative Center

St. Louis Community College at Florissant Valley
St. Louis Community College at Forest Park
St. Louis Community College at Meramec

Tulsa Junkor College

Utah Higher Education, System Office

Virginia State Community College

Washington State Community College District

Spokane Community College
Spokane Falls Community College

West Los Angeles College

Wisconsin, University of System

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